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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/686,205

10/15/2003

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EXAMINER

CHEN, SHIN HON

ART UNIT

PAPER NUMBER

2131

MAIL DATE

DELIVERY MODE

08/29/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/686,205

Applicant(s)

WINGET, NANCY CAM

Examiner

Shin-Hon Chen

Art Unit

2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7-9,11 and 13-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7-9,11 and 13-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-5, 7-9, 11 and 13-18 have been examined.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 16-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 16-18 discloses an article of manufacture embodied in a computer readable medium, wherein the computer readable medium includes carrier wave/pulse (Specification: page 6 line 15). **MPEP 2106.01 REV. 5.**

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 7-9, 11 and 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotani in view of Aerrabotu et al. U.S. Pub. No. 20040203598 (hereinafter Aerrabotu) and further in view of Edasawa et al. U.S. Pub. No. 20030005293 (hereinafter Edasawa)..

5. As per claim 1, 11 and 16, Kotani discloses a method for validating an electronic transmission, the method comprising the steps of: generating a group key for encrypting and signing an electronic message transmitted on a network (Kotani: [0053]: group key is used); establishing a group key name corresponding to the group key for encrypting and signing the electronic message transmitted to a group of clients on the network (Kotani: [0054]: the common key is prepared in both sides); transmitting a data packet, the data packet including the group key name (Kotani: [0057]: the identification code corresponds to group key is added to the header), the electronic message and group key name (Kotani: [0054]: the common key is prepared in both sides; [0057]: identification code for the group keys); receiving the data packet; validating the group key name in the received data packet (Kotani: [0104]: validate group ID); the step of validating further includes the step of comparing the received group key name to a group key name table (Kotani: [0106]: select the group key by the ID; figure 2: key portion).

Kotani does not explicitly disclose the data packet includes signature to authenticate the electronic message. However, Aerrabotu discloses transmitting a message from server to client that includes signature in the header portion to validate the trustworthiness of transmitting side (Aerrabotu: [0027]: the header includes signature data field). It would have been obvious to one having ordinary skill in the art to include signature in the header portion of a data packet because both prior art discloses method of communicating data that contains message and header in distributed network environment. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Aerrabotu within

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the system of Kotani because embedding signature within the header portion of a message allows a device to validate source of the message (Aerrabotu: [0027]).

Kotani as modified does not explicitly disclose the step of discarding the received multicast message if the received group key name does not match an entry in the group key name table. However, Edasawa discloses discarding message if group ID does not match (Edasawa: [0297]: discard message if group ID do not match). It would have been obvious to one having ordinary skill in the art to discard received message if the group ID do not match because both the messages are directed toward multicast using group keys. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Edasawa within the combination of Kotani-Aerrabotu because it avoids redundant processing of unintended message.

6. As per claim 2, Kotani as modified discloses the method of claim 1. Kotani further discloses the method comprises the step of adding the group key name and the message authentication signature to a packet name extension prior to the step of transmitting (Kotani: [0057]: identification code correspond to group key is added to the header; Aerrabotu: [0027]: signature is embedded in the header). Same rationale applies here as above in rejecting claim 1.

7. As per claim 3, Kotani as modified discloses the method of claims 1. Kotani as modified further discloses wherein the step of transmitting includes transmitting any suitable communication network includes but not limited to wireless network in accordance with 802.11 protocol (Kotani: [0046]: applies to any communication network). It would have been obvious

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to use 802.11 communication protocol because 802.11 is standard protocol for wireless network. Therefore, it would have been obvious to one having ordinary skill in the art to use 802.11 protocol because standards are extremely important in the computer industry because they allow the combination of products from different manufacturers to create a customized system.

8. As per claim 4, Kotani as modified discloses the method of claim 1. Kotani as modified further discloses the method comprises the step of establishing an authenticated relationship (Kotani: [0116]: common key is prepared in both the transmission side and reception side).

9. As per claim 7, Kotani as modified discloses the method of claim 6. Kotani as modified further discloses the steps of: establishing a local group key name; and storing the locally established group key name in the group key name table (Kotani: [0018] and [0106] and figure 2: plurality of keys were stored locally that corresponds to identification codes).

10. As per claim 8, Kotani as modified discloses the method of claim 1. Kotani further discloses the step of encrypting the multicast message prior to transmission (Kotani: [0057]: the body is encrypted and decrypted by group key).

11. As per claim 9, Kotani as modified discloses the method of claim 1. Kotani as modified further discloses the step of decrypting the received multicast message if the received group key name matches an entry in the group key name table (Kotani: [0106]: select the group key according to the group ID).

12. As per claim 13, 14, and 17, Kotani as modified discloses the system of claims 11 and 16. Kotani as modified further discloses wherein the step of transmitting includes transmitting any suitable communication network includes but not limited to wireless network (Kotani: [0046]: applies to any communication network including wireless network). It would have been obvious to use 802.11 communication protocol because 802.11 is standard protocol for wireless network. Therefore, it would have been obvious to one having ordinary skill in the art to use 802.11 protocol because standards are extremely important in the computer industry because they allow the combination of products from different manufacturers to create a customized system.

13. As per claim 15, Kotani as modified discloses the system of claim 11. Kotani further discloses wherein the group key name is a unique identifying element (Kotani: [0087]: only the communication terminals of the same group can communicate).

14. As per claim 18, Kotani as modified discloses the article of claim 16. Kotani further discloses wherein the message receiving logic further includes means for causing a processing system to compare a received group key name with a local key name table (Kotani: [0109] and figure 2).

15. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kotani in view of Aerrabotu and further in of Edasawa and further in view of Kang et al. U.S. Pub. No. 20040073796 (hereinafter Kang).

16. As per claim 5, Kotani as modified discloses the method of claim 4. Kotani as modified does not explicitly disclose wherein the step of establishing an authenticated relationship employs a handshake protocol. However, Kang discloses the handshake protocol for establishing user authentication and exchange of keys (Kang: [0007]). It would have been obvious to one having ordinary skill in the art to apply the handshake protocol to establish keys in both the transmission side and receiving side (Kotani: [0054]: keys are prepared for both sides) because handshake protocol is well known for key exchange in communication networks. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Kang within the combination of Kotani-Aerrabotu because handshake protocol defines a state machine about wireless LAN user authentication and exchange of an encryption key to be used in a wireless network (Kang: [0007]).

Response to Arguments

17. Applicant's arguments filed 6/25/07 have been fully considered but they are not persuasive.

Regarding applicant's remarks, applicant disagrees with the 101 rejection stating that the functional descriptive material recorded on some computer-readable medium including carrier wave is patentable. However, such signal claims are ineligible for patent protection because they do not fall within any of the four statutory classes of Sec. 101.

On the other hand, applicant argues that the prior art of record does not disclose discarding message when the group ID does not match. However, Edasawa discloses that

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limitation as specified in prior office action (Edasawa: [0297]: discard message if group ID do not match). Therefore, applicant's argument is traversed.

Conclusion

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shin-Hon Chen whose telephone number is (571) 272-3789. The examiner can normally be reached on Monday through Friday 8:30am to 5:30pm.

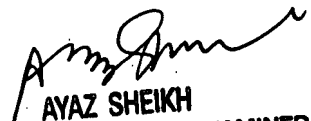
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Shin-Hon Chen
Examiner
Art Unit 2131

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